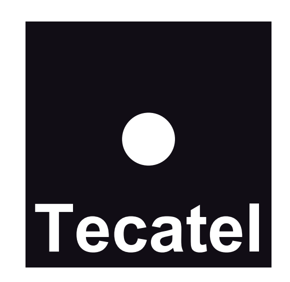


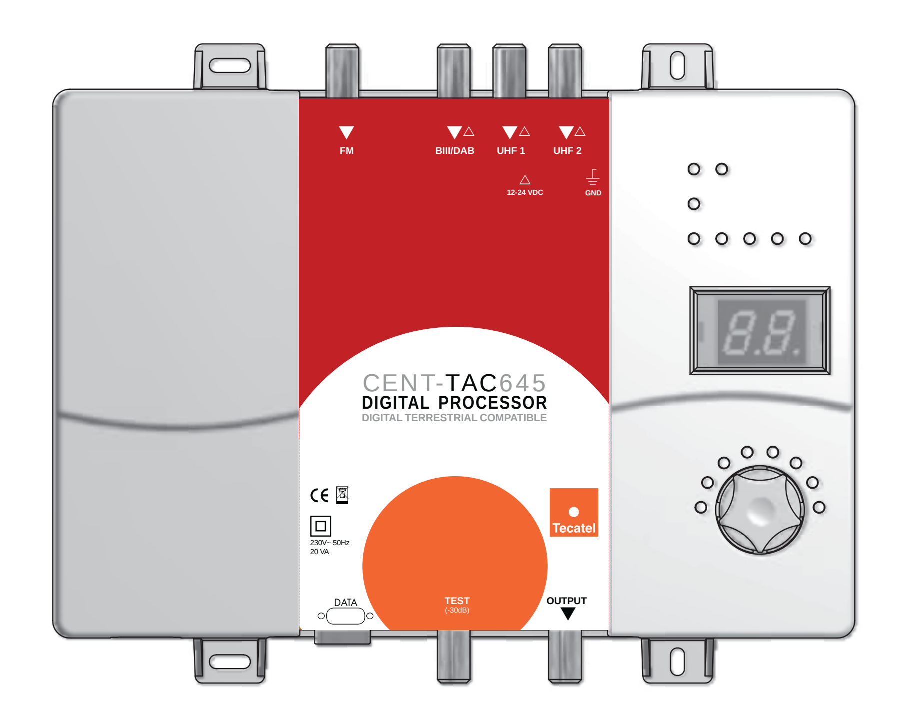
CENTRAL DIGITAL PROGRAMABLE

Manual de usuario

CENT-TAC 645

PROGRAMMABLE DIGITAL HEADEND AMPLIFIER

Instructions manual p.19



CENTRAL DIGITAL PROGRAMABLE

CARACTERISTICAS

> Diseñado para canales analógicos y digitales
> 4 entradas FM , B III / DAB y 2 x UHF
> 6 clusters UHF del ancho de banda de 1 a 7 canales
> Fácil programación usando un botón pulsador rotativo y vizualización de los ajustes en un display de 2 dígitos y LEDs para cada cluster y cada entrada.
> La unidad puede ser bloqueada mediante código de seguridad
> Función de copia para transferir toda la programación de una unidad a otra reduciendo el tiempo de instalación
> Filtros de gran selectividad
> Bajo figura de ruido y amplificadores de gran ganancia de banda partida
> Amplificador de 20 dB conmutable en cada entrada de UHF para permitir altos niveles hasta 105 dBμV
> Ecualización precisa mediante atenuador con 1 dB de paso
> Control de tensión selectiva en las entradas de B III /DAB y UHF
> Telealimentación 12 o 24 V
> Salida Test -30 dB

INSTRUCCIONES DE SEGURIDAD

Leer detenidamente estas instrucciones antes de conectar la unidad.

El voltaje viene indicado en el aparato.

Para prevenir fuego, corto-circuito, peligro de descargas:
No exponga la unidad a la lluvia o humedad.
Instale la unidad en un lugar seco sin filtraciones o condensaciones de agua.
No la exponga a salpicaduras.
No ponga objetos con líquido, en el aparato.
Si cae algún líquido en la carcasa accidentalmente, desconecte la corriente.
Diríjase a un tecnico cualificado antes de su puesta en marcha.

Para evitar riesgos por calentamiento:
Instale la unidad en un buen lugar y mantenga una distancia mínima de 15 cm alrededor del aparato con suficiente ventilación.
No ponga ningún articulo como papel de periódico, manteles, cortinas... encima de la unidad que puedan cubrir las aperturas de ventilación.
La unidad no debe ser expuesta a fuentes de calor (sol, calefacción,...).
No ponga ninguna fuente de calor, tales como velas en el aparato.
No instale el aparato en un lugar con mucho polvo.

Desconecte el cable de corriente para realizar las diferentes conexiones.

Para evitar descargas eléctricas, no abra la carcasa del adaptador.

Limpieza:
Use solamento un paño seco para limpiar la carcasa. No utilice disolventes.

Mantenimiento:
Para reparaciones o mantenimiento dirijase al servicio tecnico postventa de Tecatel.
La apertura, mal uso o manipulacion indebida de la unidad sera motivo de perdida de garantia..

DESCRIPCION

FM

BIII / DAB

UHF1

UHF2

Tierra

LEDs para las Entradas y Clusters

Display de 2 Dígitos

Modo / Función LEDs

Rotativo / Botón de Presión

Corriente Electrica 230V~

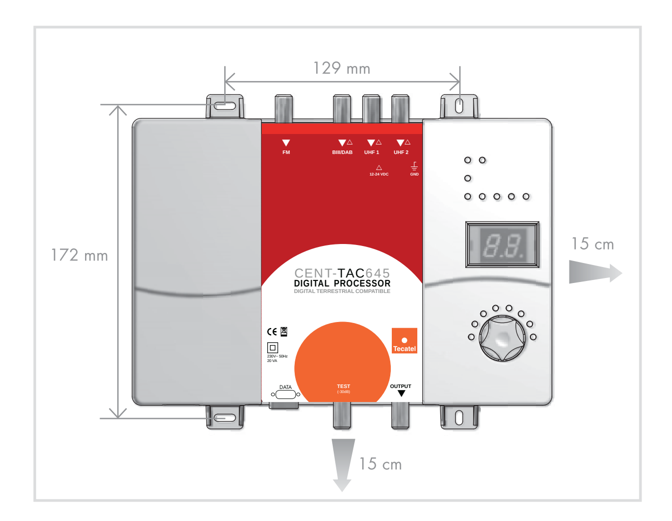
Salida

Test de Salida

Conector DSUB9

MONTAJE

Deje un espacio mínimo de 15 cm alrededor del producto para garantizar la máxima ventilación.



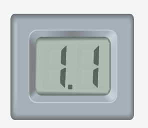


Todos los parámetros son fijados con el botón de presión rotativo.
Cada función y parámetros se muestran mediante un display de 2 dígitos y diferentes LEDs.

Programación

Entrada modo de programación

> Realice todas las conexiones necesarias y conecte el amplificador a la corriente.



La versión del software sale en el display.



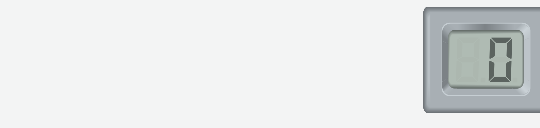
seguido de un punto.

> Presione el botón durante más de 3 segundos para acceder al sistema de programación.



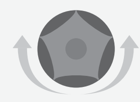
¡ ATENCIÓN !

Cuando el código de seguridad está activado (ver “Salida modo programación” página 5):



El display indica “0”

> Gire el botón hasta que indique “50”





> Presione el botón para confirmar el código

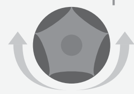


Nota: el código de seguridad “50” se ha fijado y puede no ser cambiado.



Repita esta sección para ajustar todos los parámetros

> Gire el botón para seleccionar el modo deseado.



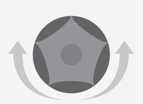
El modo está indicado con un LED de color verde.

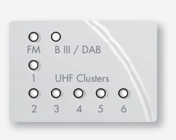
> Presione el botón para entrar al modo seleccionado.



El LED es ahora rojo

> Dentro del modo, gire el botón para seleccionar el parámetro (entrada, cluster, canal, nivel, …)





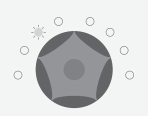
LEDs Entradas y Clusters



Display

> Presione el botón para confirmar la programación.

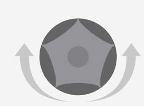


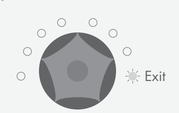


LED vuelve a ponerse verde.

Salida modo programación

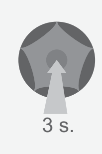
> Gire el botón para seleccionar el modo Exit (Salida).

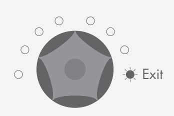


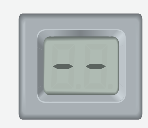


El LED está verde

> Presione el botón durante más de 3 seguntos para confirmar.

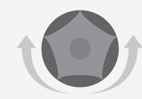






El LED está rojo y en el display aparecen dos guiones

> Gire el botón para seleccionar





Libre acceso al modo programación

o

Acceso al modo programación con código "50"

> Presione el botón para confirmar.





Un punto aparece en el display

Nota:
El amplificador pasará a modo "stand-by" y aparecerá un punto en el display pasado un minuto sin usar el botón.



Ajustar clusters / Entradas UHF

El amplificador tiene 2 entradas UHF las cuales están divididas sobre 6 clusters.

Hay 3 posibles configuraciones:

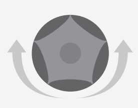
Entrada	UHF1	UHF2
Número de Cluster(s)	6	0
	3	3
	4	2

UHF1 los clusters están indicados por LEDs ROJOS n° 1, 2, 3,4,5 y 6.

UHF2 los clusters están indicados por LEDs VERDES n° 4, 5 y 6.

Para ajustar el número de clusters por entrada:

> Gire el botón para seleccionar Split UHF (Entrada UHF)..



Split UHF

El LED está verde.

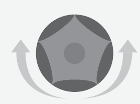
> Presione el botón para confirmar.



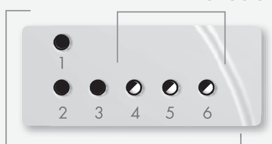
Split UHF

El LED está rojo.

> Gire el botón para ajustar una configuración:



Indicador cluster UHF2



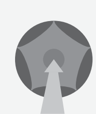
Indicador cluster UHF1

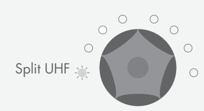


Display de la configuración seleccionada:

Entrada	Display	UHF1	UHF2
Número de Cluster(s)	"6.0"	6	0
	"3.3"	3	3
	"4.2"	4	2

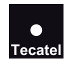
> Presione el botón para confirmar.





El LED está verde.

Nota:
Cada cluster non usado debe ser desconectado (Función de Aparcado).
Ajuste el cluster en el canal 00 (vea el párrafo siguiente capítulo "Ajustando canales / clusters").



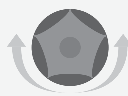
Ajustando canales / clusters

Cada cluster UHF tiene un ancho de banda el cual puede ser programado desde 1 a 7 canales .
El cluster VHF tiene un ancho de banda el cual puede ser programado por 1 o 4 canales

Para ajustar el canal o canales por cluster :

En el ejemplo siguiente el cluster 1 es ajustado para los canales 22 a 26.

- Gire el botón para seleccionar the Filter-Input mode.



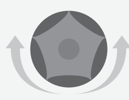
Filter Input — El LED está verde

> Presione el botón para entrar en el modo seleccionado.



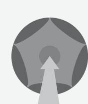
Filter Input — El LED está ahora en rojo

> Dentro del modo, gire el botón para seleccionar el cluster, que se va a ajustar.



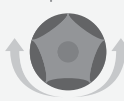
2 3 4 5 6 — LED n°1

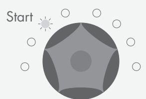
> Presione el botón para confirmar.



Filter Input — El LED está verde

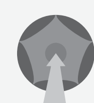
- Gire el botón para seleccionar modo Start (Canal Inicial).

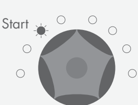




El LED está verde

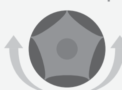
> Presione el botón para entrar en el modo seleccionado.





El LED está ahora en rojo

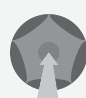
> Gire el botón para seleccionar el canal inicial.



22 — Display

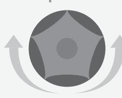
> Presione el botón para confirmar.





Start — El LED está verde

- Gire el botón para seleccionar modo Stop (Canal Final).



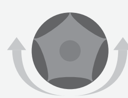
Stop — El LED está verde

> Presione el botón para entrar en el modo seleccionado.



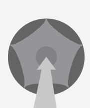
Stop — El LED está ahora en rojo

> Gire el botón para seleccionar el canal final.



26 — Display

> Presione el botón para confirmar.



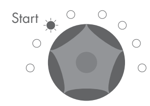
Stop — El LED está verde.

Repita esta sección para ajustar todos los clusters.



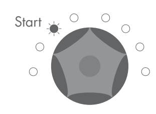
Notas:

> Modo Monocanal:
Cuando el canal de comienzo (Start) es seleccionado, el canal finalización (Stop) es ajustado automáticamente con el mismo valor.



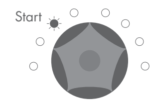


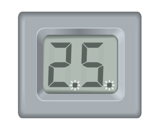
> Función de aparcado: Para desconectar el cluster, seleccione Start (Canal Inicial) y ajuste canal 00.
El Stop (Canal Final) ira automáticamente al canal 00



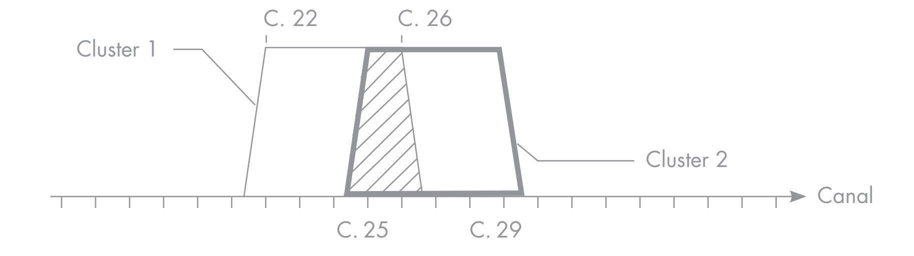


> Si hay clusters solapados, el display emite un punto parpadeante de forma intermitente.





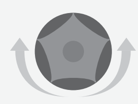
Cluster 1 = C. 22 a C. 26
Cluster 2 = C. 25 a C. 29





Para comprobar los ajustes de canal por cada cluster:

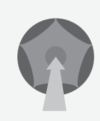
• Gire el botón para seleccionar el modo Filter-Input (Selección Filtro).





El LED está verde.

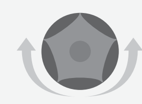
> Presione el botón para entrar en el modo seleccionado.





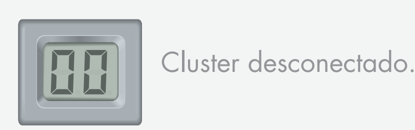
El LED está ahora en rojo.

> Gire el botón para seleccionar el cluster que desea comprabar.

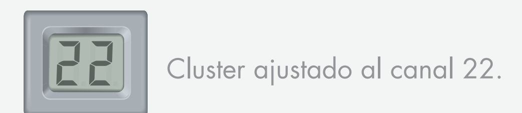


> El display muestra los canales ajustados

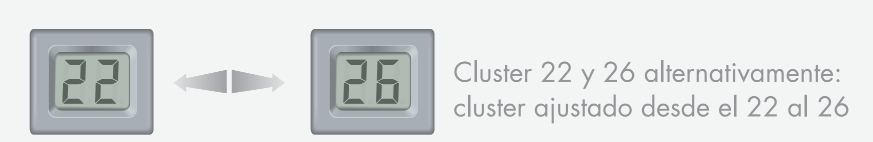
Ejemplos:



Cluster desconectado.

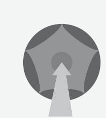


Cluster ajustado al canal 22.



Cluster 22 y 26 alternativamente:
cluster ajustado desde el 22 al 26

> Presione el botón para salir.



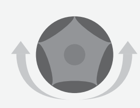


El LED está verde.

> Seleccione la entrada o cluster deseado

Ejemplo: ajustar el nivel de FM

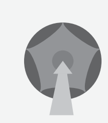
- Gire el botón para seleccionar el modo Filter-Input (Selección Filtro).





El LED está verde.

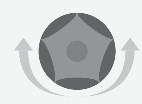
> Presione el botón para entrar en el modo seleccionado.





El LED está ahora en rojo.

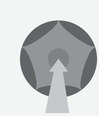
> Gire el botón para seleccionar FM





LED está activado.

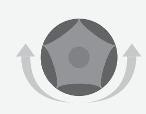
> Presione el botón para confirmar.





El LED está verde.

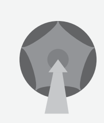
- Gire el botón para seleccionar el modo Level (Nivel).





El LED está verde.

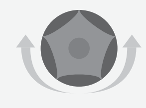
> Presione el botón para entrar en el modo seleccionado.





El LED está ahora en rojo.

> Gire el botón para ajustar el nivel, se puede variar desde 20 dB hasta 0 dB (30 dB hasta 0 dB para clusters)

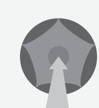




20 dB = nivel max. FM y BIII/DAB

30 dB = nivel max. clusters UHF

> Presione el botón para confirmar.





El LED está verde.

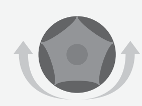
Repita esta sección para ajustar todos los niveles.

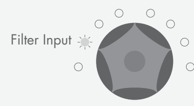
Cada entrada UHF tiene un amplificador 20 dB conmutable.
Esto es utilizado como atenuador 20 dB adicional para los niveles hasta 105 dBµV.

Para desactivar el amplificador de entrada UHF.

> Seleccione la entrada que debe atenuarse.

- Gire el botón para seleccionar el modo Filter-Input (Entrada).

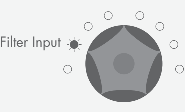




El LED está verde.

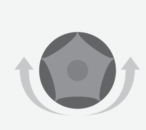
> Presione el botón para entrar en el modo seleccionado.

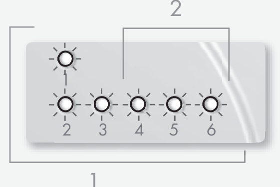




El LED está ahora en rojo

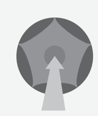
> Gire el botón continuamente para seleccionar toda la UHF.

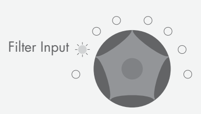




Todos los LED están activados

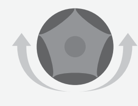
> Presione el botón para confirmar.

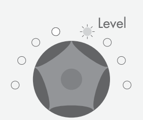




El LED está verde.

- Gire el botón para seleccionar el modo Level (Nivel).

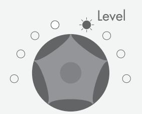




El LED está verde.

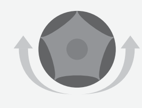
> Presione el botón para entrar en el modo seleccionado.





El LED está ahora en rojo.

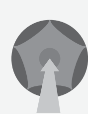
> Gire el botón para desactivar el amplificador de 20 dB.





En posición 'OFF'
la señal de entrada
se reduce de 20 dB.

> Presione el botón para confirmar.



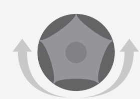


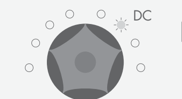
El LED está verde.

El filtro-amplificador permite de alimentar, desde las entradas BIII / DAB y UHF, preamplificadores exteriores en 12 o 24 Voltios.

Para seleccionar la tensión 12 o 24 Voltios

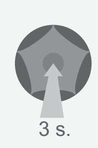
> Gire el botón para seleccionar el modo DC (Alimentación).

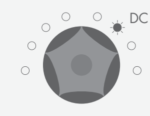




El LED está verde.

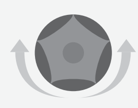
> Presione el botón durante mas de 3 segundos para entrar en el modo seleccionado.



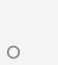


El LED está ahora en rojo.

> Gire el botón continuamente para seleccionar la tensión de telealimentación.

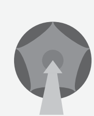


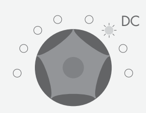






> Presione el botón para confirmar.



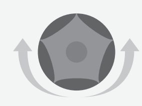


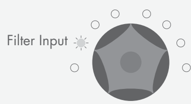
El LED está verde.

Nota:
Un solo valor de tensión es aplicable.
No es posible tener 12 V sobre la entrada UHF1 y 24 V sobre UHF2 por ejemplo.

Para activar la telealimentación

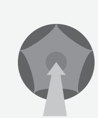
- Gire el botón para seleccionar el modo Filter-Input (Entrada).

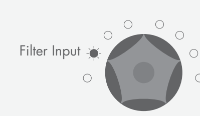




El LED está verde.

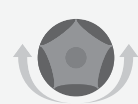
> Presione el botón para entrar en el modo seleccionado.





El LED está rojo.

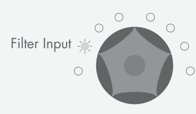
> Gire el botón para seleccionar la entrada BIII / DAB o el cluster UHF.





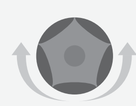
> Presione el botón para confirmar.





El LED está verde.

- Gire el botón para seleccionar el modo DC (Alimentación).

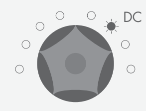




El LED está verde.

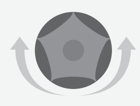
> Presione el botón para entrar en el modo seleccionado.





El LED está ahora en rojo

> Gire el botón para activar la telealimentación sobre la entrada o el cluster seleccionnado DC



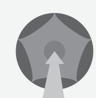


telealimentación activada



sin telealimentación

> Presione el botón para confirmar.





El LED está verde.

Notas:

Cuando la telealimentación es activada para un cluster, no es necesario activarla para los otros clusters de la misma entrada.

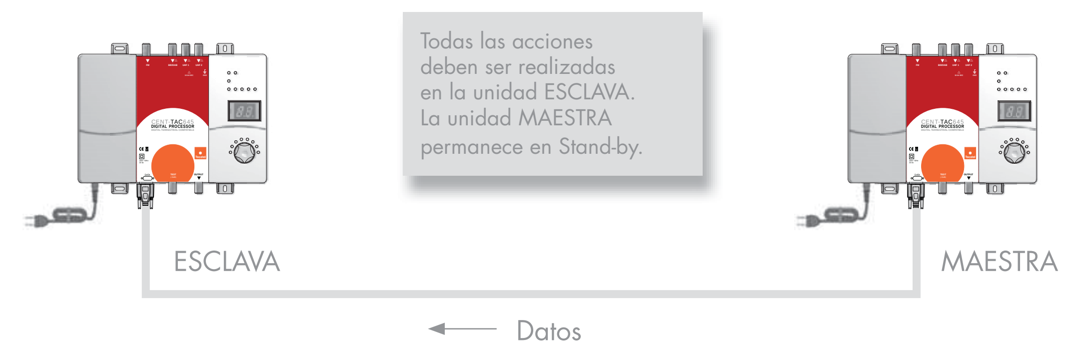
En caso de cortocircuito, el display muestra “SC”.
Suprimir el cortocircuito para restablecer el funcionamiento normal.

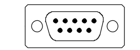




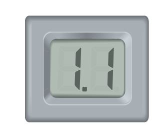
Esta función permite transmitir todos los ajustes desde una unidad a otra unidad o importar desde la memory stick (opcional).

Copia unidad a unidad:



> Conecte la unidad Maestra y la Esclava con un cable DSUB9 macho/macho cruzado. 

> Después conecte la corriente de las unidades.

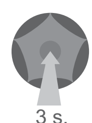


La version del software aparece en el display,

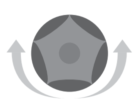


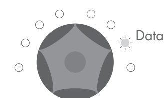
seguido de un punto.

> Presione el botón durante más de 3 segundos para entrar en el modo de programación (ver página 4).



> Gire el botón para seleccionar el modo **Data**.

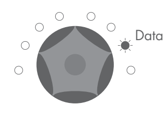




El LED está verde.

> Presione el botón durante más de 3 segundos para entrar en el modo seleccionado.



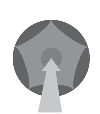


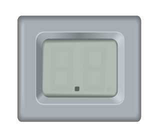
El LED está ahora en rojo.



"AL " aparece en el display.

> Presione el botón para confirmar la importación de datos.





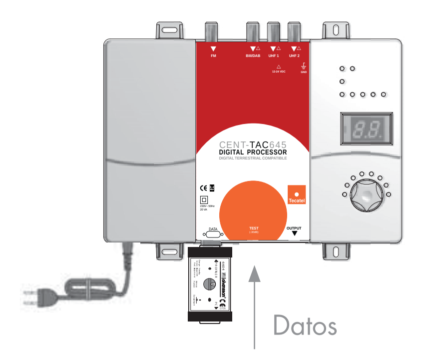
Un punto aparece en el display.

Nota:
Si ocurre un problema durante la transmisión de datos el display mostrará un mensaje de error:
Los posibles causas son: el cable no es el adecuado, no hay cable, mal contacto en los pins...





Copia desde la Memory Stick ref. STICK-TACPLUS (opcional).



> Conectar la Memory stick a la unidad.

> Seleccionar la configuración de la memory stick para ser transferido a la unidad.

> Después conecte la corriente de la unidad.



La version del software aparece en el display,

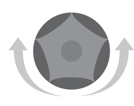


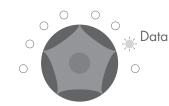
seguido de un punto.

> Presione el botón durante más de 3 segundos para entrar en el modo de programación (ver página 4).



> Gire el botón para seleccionar el modo Data.

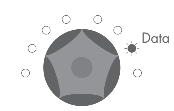




El LED está verde.

> Presione el botón durante más de 3 segundos para entrar en el modo seleccionado.





El LED está ahora en rojo.



"AL " aparece en el display.

> Presione el botón para confirmar la importación de datos.





Un punto aparece en el display.

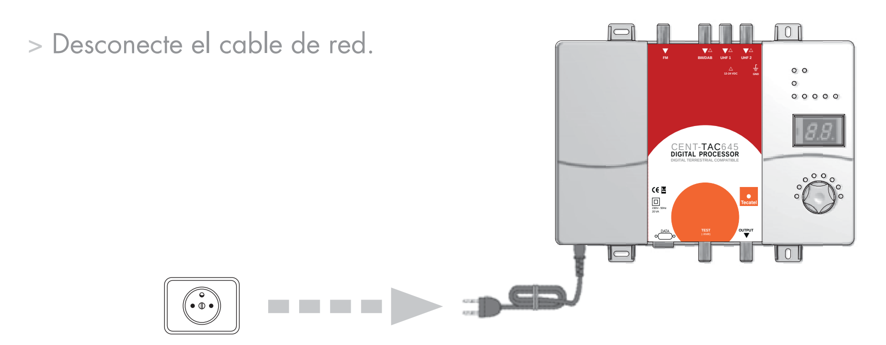


RESET GENERAL

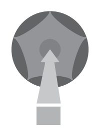
Esta función puede reestablecer los parametros al valor cero.

Nota: código de seguridad no está reseteado.

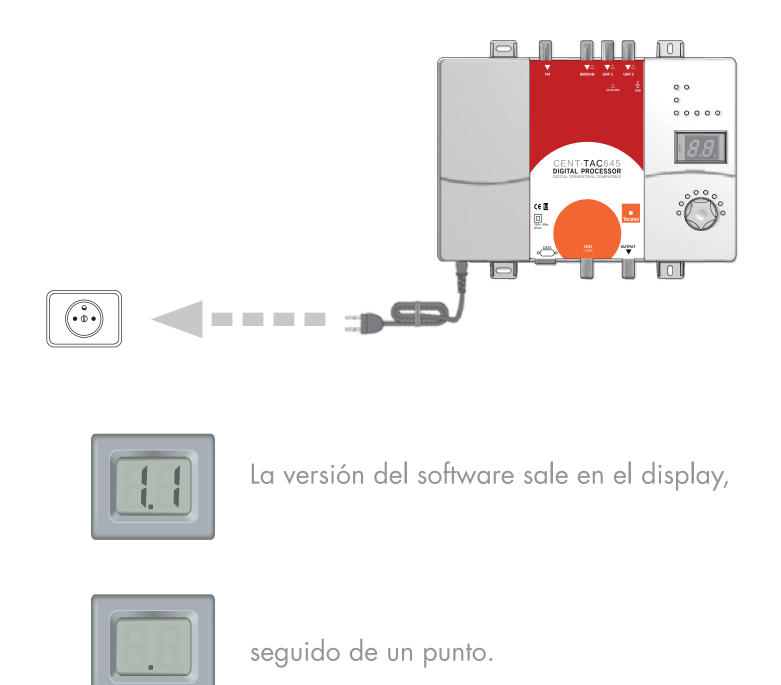
> Desconecte el cable de red.



> Mantenga el botón pulsado,



> Hasta que haya conectado de nuevo el cable de red.



La versión del software sale en el display,

seguido de un punto.

> Suelte ahora el botón.

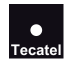
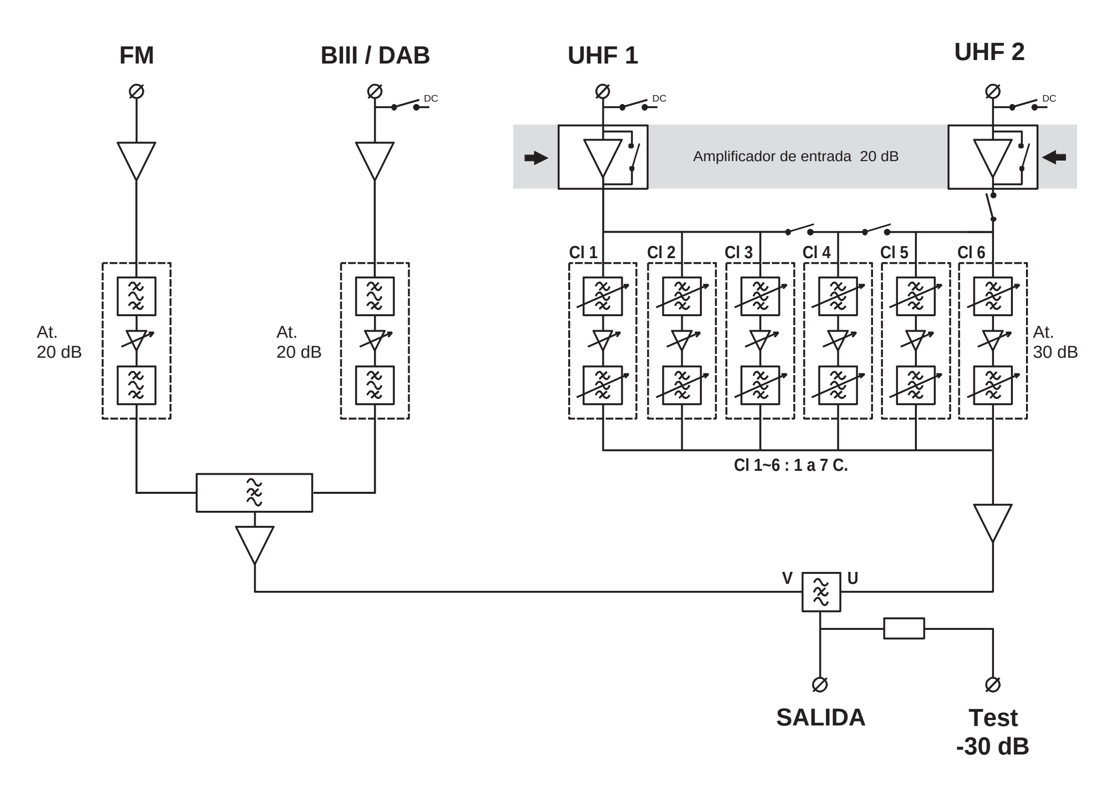


DIAGRAMA DE BLOQUES



ESPECIFICACIONES TECNICAS

Entradas	B I-FM	B III/DAB	UHF 1	UHF 2
Rango de frecuencia (MHz)	88-108	174-240	470-862	470-862
			8-56 (1 a 7 canales / cluster)	
Configuración de los clusters	-	-	6	0
			3	3
			4	2
Ganancia (dB)	35	35	45	45
Atenuador (dB)	20	20	30	30
Figura de ruido (dB)	5	5	6	6
Máx nivel de entrada (dBµV)	80	80	105	105
Máx nivel de salida * (dBµV)	116	116	116	116
Selectividad	-	15 dB / 10 MHz	10 dB / 10 MHz	-
Pérdida de retorno Entrada / Salida (dB)	>10	>10	>10	>10
Telealimentación 12 / 24 V (100 mA en total)	-	si	si	si
Salida Test (dB)	-30			
Transferencia datos	DSUB9 connector			
Alimentación	230 V~ / 20 VA			
Temperatura de funcionamiento (° C)	- 5 a + 50			
Dimensiones (mm)	231 x 185 x 53			

* -54 dB / IM3

Todas las especificaciones pueden ser sujetos a cambios sin previo aviso





DECLARACIÓN DE CONFORMIDAD
DECLARATION OF CONFORMITY



Fabricante / Manufacturer: **TECATEL, S.A.**

Dirección / Address:
C/Lletra B, nº1.
Polígono Industrial Pardines
46722 Beniarjó
Valencia (Spain)

CIF/VAT: A-46940524

Declara bajo su responsabilidad la conformidad del producto:

Declares under its responsibility the conformity of the product:

Tecatel CENT-TAC645
Central digital programable,6 clusters UHF, 45dB
45dB,6 cluster, Programmable filter amplifier

País de fabricación/*Manufacturing country: Czech Republic*

Al que se refiere esta declaración con las normas y estándares siguientes:

To which this declaration refers with the following norms and standards

LVD:	***EN60065:2002***
	EN60728-11:2005
EMC:	***EN50083-2:2001+A1/2005***
	EN61000-3-2:2000+A2/2005
	EN61000-3-3:1995+A1:2001+A2/2005

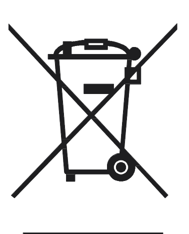
De acuerdo con las disposiciones de las Directivas 2006/95/EC de Baja Tensión y 2004/108/EC de Compatibilidad Electromagnética del Parlamento Europeo y del Consejo.

According to the provisions set forth in the European Parliament and Council Directives 2006/95/EEC LVD (Low Voltage) and 2004/108/EEC EMC (Electromagnetic Compatibility).

Beniarjó, 25/01/2010



Sergio Benavent
Responsable de producto

	Este producto cumple con los requisitos de las directivas 2004/108/EC y 2006/95/EC
	De acuerdo con la directiva Europea WEEE sobre gestión de residuos de materiales eléctricos y electrónicos, este producto debe tener un tratamiento particular en su desecho. La recogida selectiva de desechos ayuda a conservar los recursos naturales y a garantizar un reciclaje que proteja la salud humana y el medioambiente. Para obtener información adicional sobre los lugares en los que puede deshacerse de equipos eléctricos y electrónicos, póngase en contacto con las autoridades competentes de su localidad o con el vendedor que le suministró el producto.

PROGRAMMABLE DIGITAL HEADEND AMPLIFIER

FEATURES

> Designed for both digital and analogue channels
> 4 inputs: FM , B III / DAB and 2 UHF inputs splitted over 6 UHF programmable clusters
> UHF clusters can have 1 to 7 channels bandwidth
> Easy programming by using one rotary / push button viewed on 2 digits display and LED's for each cluster and each input
> Unit can be locked by security code
> "Copy" function in order to transfer all settlements from one unit to another reducing time of installation
> High selectivity filters
> Low noise and high gain split band amplifiers
> High UHF inputs levels up to 105 dBµV by switchable 20 dB input amplifier
> Attenuators with 1 dB step for accurate equalization
> Selectable remote power on B III and UHF inputs
> 12 - 24 V selectable remote power
> -30 dB Test output

SAFETY INSTRUCTIONS

Read carefully these instructions before connecting the unit.

The operating voltage is indicated on the apparatus.
To prevent fire, short circuit, shock hazard:
Do not expose the unit to rain or moisture.
Install the unit in a dry location without infiltration or condensation of water.
Do not expose it to dripping or splashing.
Do not place objects filled with liquids, such as vases, on the apparatus.
If any liquid should accidentally fall into the cabinet, disconnect the power plug.
Refer to qualified technician before it's further operation.

To avoid any risk of overheating:
Install the unit in a well airy location and keep a minimum distance of 15 cm around the apparatus for sufficient ventilation.
Do not place any items such as newspapers, table-cloths, curtains ... on the unit that might cover the ventilation holes.
The unit must not be exposed to any source of heat (sun, heater,...).
Do not place any naked flame sources, such as lighted candles, on the apparatus.
Do not install the product in a dusty place.

Pull out power plug to make the different connections of cables.

To avoid electrical shock, do not open the housing of adapter.

Cleaning:
Only use a dry soft cloth to clean the cabinet. Do not use solvent.

Servicing:
For repairing and servicing refer to the after sales department of Tecatel.
The opening, misuse or tampering will cause the product not to be covered by the warranty.

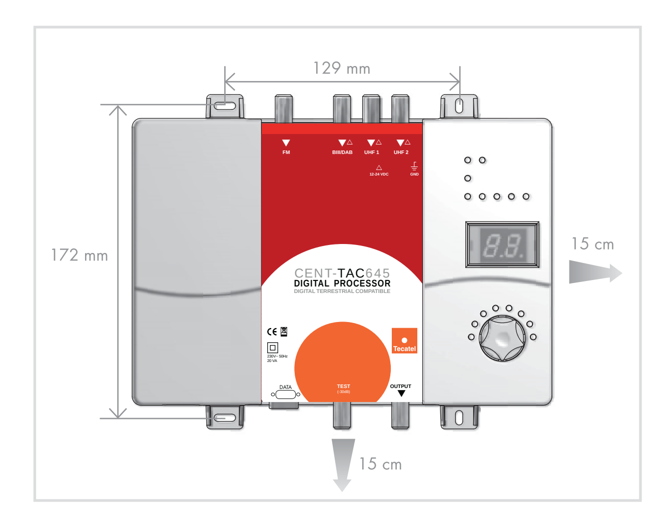


DESCRIPTION

FM
BIII / DAB
UHF1
UHF2
Grounding
LED's for Inputs and Clusters
2 Digit Display
Mode / Function LED's
Rotary / Push Button
Mains 230-240V~
Output
Test Output
DSUB9 Connector

MOUNTING

Leave a minimum space of 15 cm around the product to guarantee a maximum ventilation.

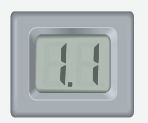


All parameters are set with the rotary push button.
Each function and parameters are shown on 2 digits display and different LED's .

Programming

Enter programming mode

> Make all the necessary connections and connect amplifier to mains.



The software version is displayed,



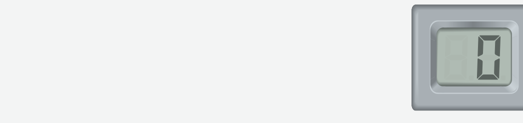
followed by a dot.

> Push on the rotary button for more than 3 seconds to enter into programming mode.



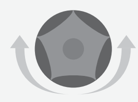
ATTENTION !

When security code is activated (see "Exit programming mode" on page 22):



is displayed.

> Turn the button to display "50"





> Push the button to confirm the code.

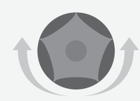


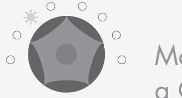
Note: the security code "50" is fixed and can not be changed.



Repeat this section to set all parameters

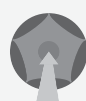
> Turn the button to select the desired mode.

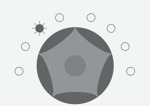




Mode is indicated with a GREEN colored LED

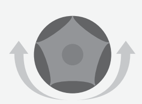
> Push the rotary button to enter the selected mode.

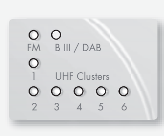




The LED is now RED

> Inside the mode, turn the button to select the parameter (input, cluster, channels, level …)





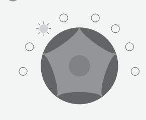
Input and Cluster LED's



Display

> Push the rotary button to confirm the parameter setting.

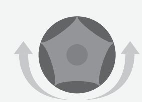


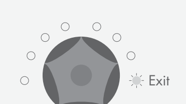


LED returns to a GREEN color.

Exit programming mode

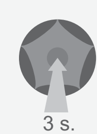
> Turn the button to select Exit mode.

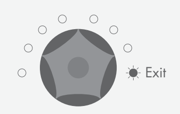


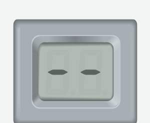


The LED is green

> Push the button more than 3 seconds to confirm.

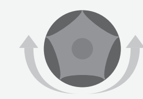


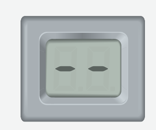




The LED is red and 2 dashes are displayed

> Turn the button to select





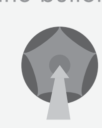
Free access to programming mode

or



Access to programming mode with security code "50"

> Push the button to confirm.





A dot is displayed

Note:
The amplifier will go in "stand-by" and will display a dot after 1 minute if the rotary / push button is not activated.



Setting clusters / UHF input

The amplifier has 2 UHF inputs which are splitted over 6 clusters.

There are three possible configurations :

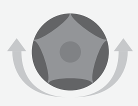
Input	UHF1	UHF2
Number of Cluster(s)	6	0
	3	3
	4	2

UHF1 clusters are indicated by the RED LED's n° 1,2,3,4,5 and 6.

UHF2 clusters are indicated by the GREEN LED's n° 4, 5 and 6.

To set the number of cluster(s) per input:

> Turn the button to select Split UHF mode.



Split UHF

The LED is green.

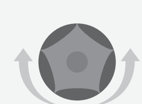
> Push the button to confirm.



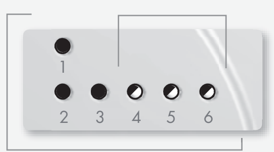
Split UHF

The LED is red.

> Turn the button to set one configuration:



UHF2 cluster indicator



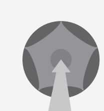
UHF1 cluster indicator

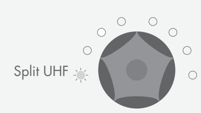


Display of selected configuration:

Input	Display	UHF1	UHF2
Number of Cluster(s)	"6.0"	6	0
	"3.3"	3	3
	"4.2"	4	2

> Push the button to confirm.





The LED is green.

Note:
Each non used cluster has to be switched off (Park function).
Set the cluster to channel "00" (see following paragraph "Setting channels / cluster").

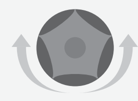
Setting channels / cluster

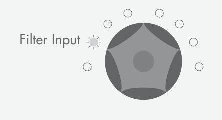
Each UHF cluster has a bandwidth which can be programmed from 1 to 7 channels.
The VHF cluster has a bandwidth of 1 or 4 channels.

To set the channel(s) per cluster:

In the following example cluster 1 is set for channel 22 to channel 26.

- Turn the button to select the Filter-Input mode.

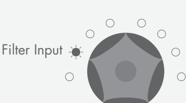


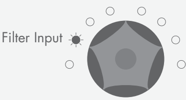


The LED is green

> Push the rotary button to enter the selected mode.

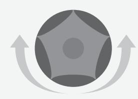


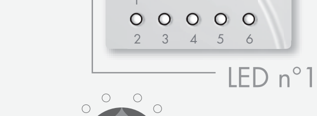




The LED is now red

> Inside the mode, turn the button to select the cluster to be set.





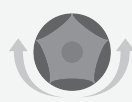
> Push the button to confirm.

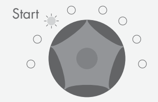
LED n°1



The LED is green

- Turn the button to select the Start mode.

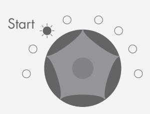




The LED is green

> Push the rotary button to enter the selected mode.





The LED is now red

> Inside the mode, turn the button to select the start channel.

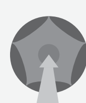






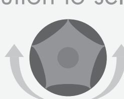
Display

> Push the button to confirm.



The LED is green

- Turn the button to select the Stop mode.

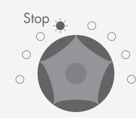




The LED is green

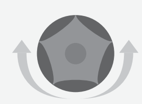
> Push the rotary button to enter the selected mode.

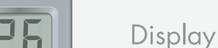




The LED is now red

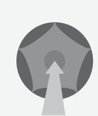
> Inside the mode, turn the button to select the stop channel.

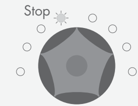




Display

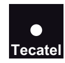
> Push the button to confirm.





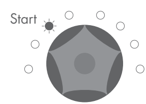
The LED is green.

Repeat this section to set all clusters



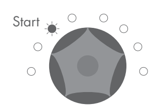
Notes :

> Single channel mode: when the Start Channel is selected, the Stop Channel is automatically set at the same value.



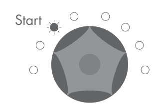


> Park function: to switch off the cluster, select Start Channel and set 00. The Stop Channel goes automatically to 00.



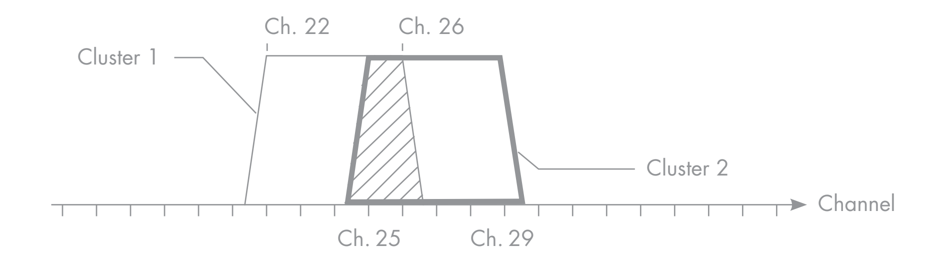


> If there are overlapping clusters, the display dots will blink alternately.





Cluster 1 = Ch. 22 to Ch. 26
Cluster 2 = Ch. 25 to Ch. 29



To check the channel settings of each cluster:

• Turn the button to select the Filter-Input mode.

Filter Input — The LED is green.

> Push the rotary button to enter the selected mode.

Filter Input — The LED is now red.

> Turn the button to choose the cluster to be checked.

> The display shows the channels which have been set

Examples:

00 — Cluster is parked.

22 — Cluster is set to channel 22.

22 ↔ 26 — Blinking 22 and 26:
cluster is set from 22 to 26

> Push the button to exit.

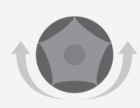
Filter Input — The led is green.



> Select the desired input or cluster

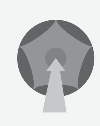
Example: setting the level of FM

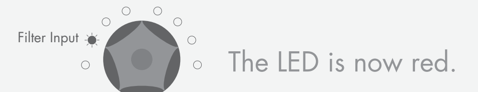
- Turn the button to select the **Filter-Input** mode.



The LED is green.

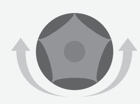
> Push the rotary button to enter the selected mode.

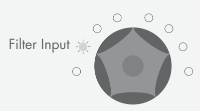




The LED is now red.

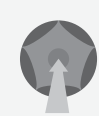
> Turn the button to select FM





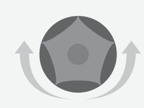
LED is activated.

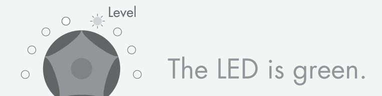
> Push the button to confirm.



The LED is green.

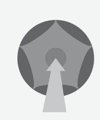
- Turn the button to select the **Level** mode.

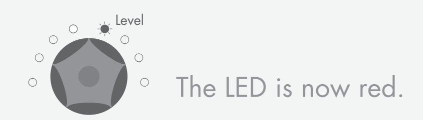




The LED is green.

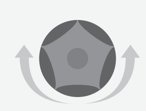
> Push the rotary button to enter the selected mode.





The LED is now red.

> Turn the button to set the level, variable from 20dB to 0 dB (30 dB to 0 dB for UHF clusters)

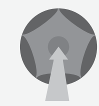


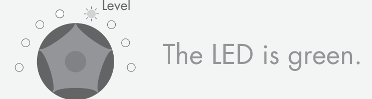


20 dB = max. level of FM and BIII/DAB

30 dB = max. level of UHF clusters

> Push the button to confirm.





The LED is green.

Repeat this section to set all the levels.

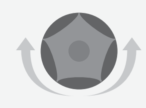


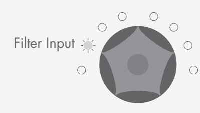
Each UHF input has a 20 dB switchable amplifier.
This is used as additional 20 dB attenuator for high levels up to 105 dBµV.

<u>To switch off the UHF input amplifier.</u>

> Select the UHF input to be attenuated.

- Turn the button to select the Filter-Input mode.

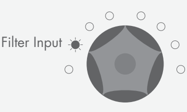




The LED is green.

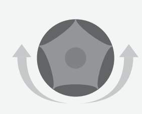
> Push the rotary button to enter the selected mode.

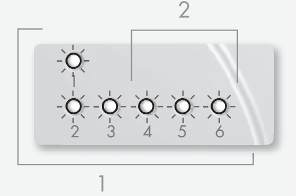




The LED is now red

> Turn the button to select the input.
Turn continuously the button through every cluster to have access to the input selection.

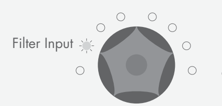




All LED's of selected input are activated

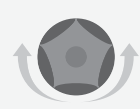
> Push the button to confirm.





The LED is green.

- Turn the button to select the Level mode.

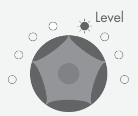




The LED is green.

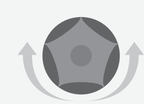
> Push the rotary button to enter the selected mode.





The LED is now red.

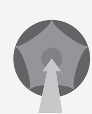
> Turn the button to switch off the 20 dB amplifier.





In 'OFF' position the input signal is 20 dB attenuated.

> Push the button to confirm.

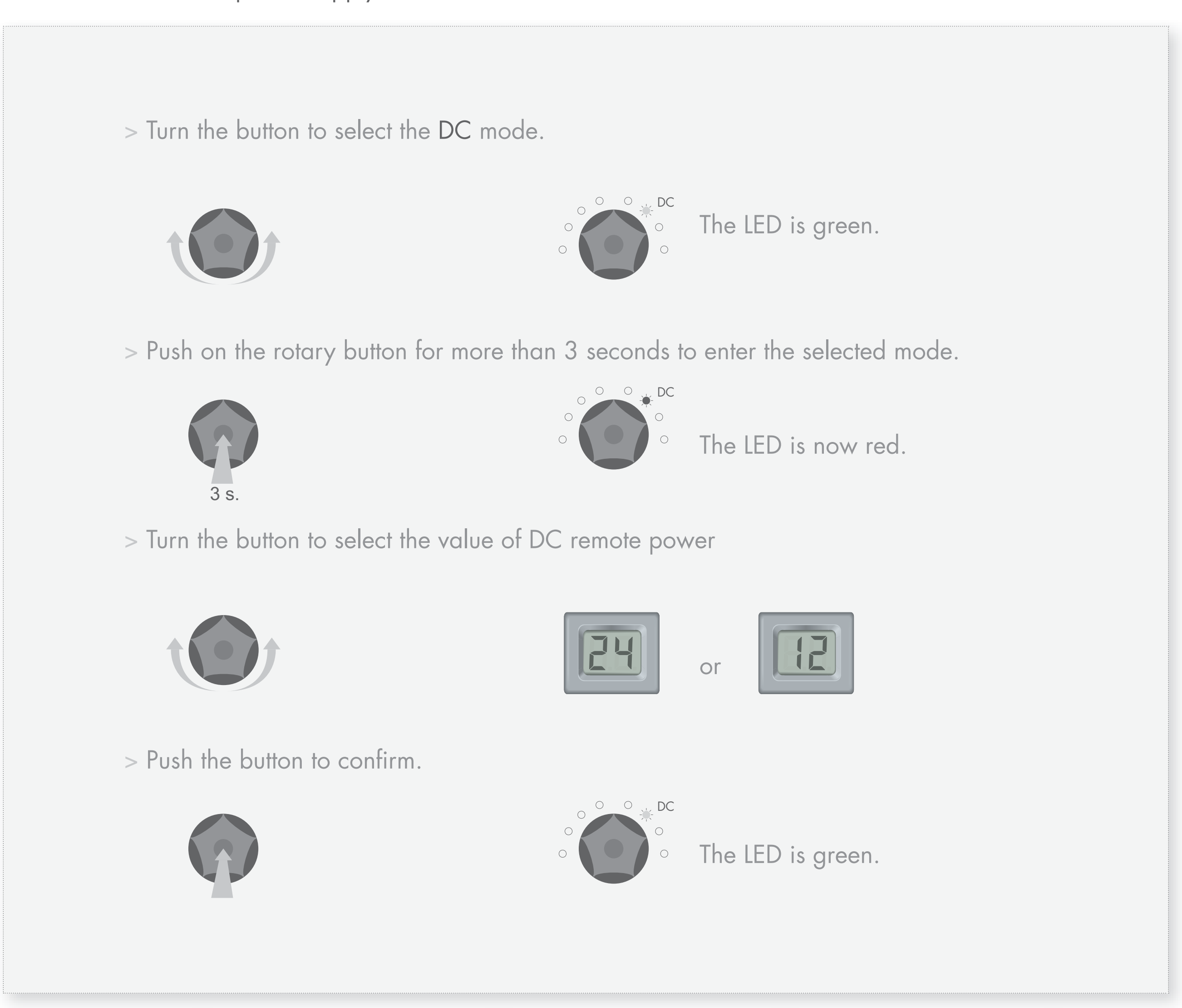




The LED is green.

Unit can power 12 V or 24 V outdoor preamplifiers on BIII / DAB and UHF inputs.

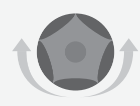
To set 12 or 24 V DC power supply

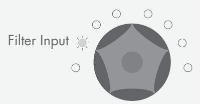


Note:
Only one value of DC can be set.
It's not possible to get 12 V on UHF1 and 24 V on UHF2 for example.

To switch on the DC power supply

• Turn the button to select the Filter-Input mode.

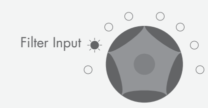




The LED is green.

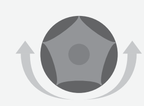
> Push the button to enter the selected mode.

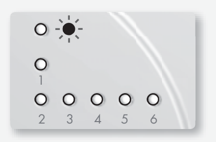




The LED is red.

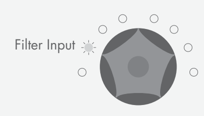
> Turn the button to select the BIII/DAB input or the UHF cluster.





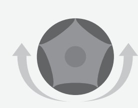
> Push the button to confirm.

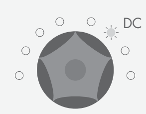




The LED is green.

• Turn the button to select the DC mode.

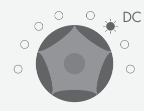




The LED is green.

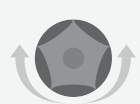
> Push the button to enter the selected mode.





The LED is now red

> Turn the rotary button to get DC remote power on selected input or cluster



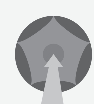


with remote power



without remote power

> Push the button to confirm.



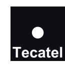
The LED is green.

Notes:

When DC is switched on for one cluster , it is not necessary to switch it on the other clusters from the same UHF input.

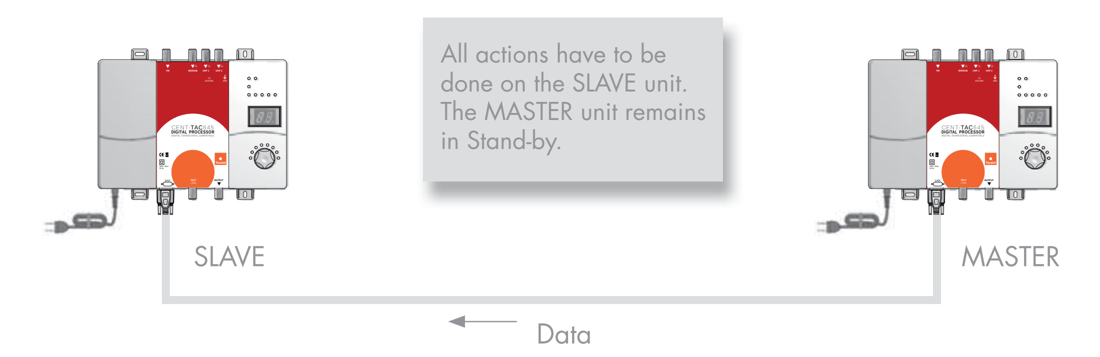
In case of short circuit , the display shows "SC" blinking.
Remove the short-circuit to restore normal operation of the unit.

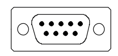




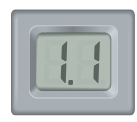
This function allows to transmit all settings from one unit to another unit or import from the memory stick (optional).

Copy from unit to unit.



> Connect master and slave unit with a DSUB9 male/male crossed cable. 

> Then connect mains to the units.



The software version is displayed,

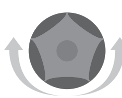


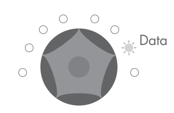
followed by a dot.

> Push the rotary button for more than 3 seconds to enter into programming mode (see page 21).



> Turn the button to select the Data mode.

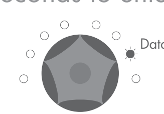




The LED is green.

> Push the rotary button for more than 3 seconds to enter the selected mode.





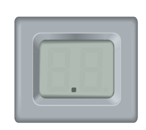
The LED is now red.



"AL "is displayed.

> Push the rotary button to confirm Data Import.





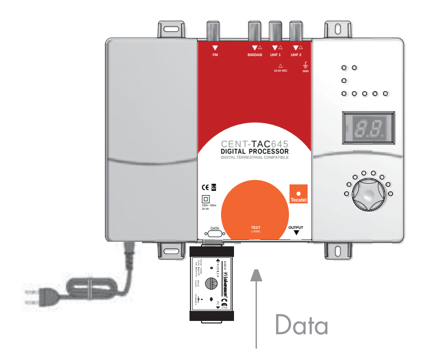
A dot is displayed.

Note:
If a problem occurs during data transmission the display will show an error message:
Possible causes are: wrong type of cable, no cable, bad pin contacts.





Copy from Memory Stick ref. STICK-TACPLUS (optional).

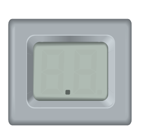


> Connect the Memory Stick to the unit

> Select the configuration of the memory stick to be transferred to the unit

> Then connect mains to the unit.

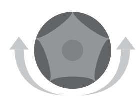

The software version is displayed,

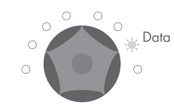

followed by a dot.

> Push on the rotary button for more than 3 seconds to enter into programming mode (see page 21).



> Turn the button to select the Data mode.

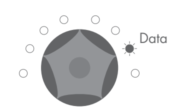




The LED is green.

> Push the rotary button for more than 3 seconds to enter the selected mode.



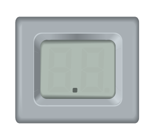


The LED is now red.


"AL "is displayed.

> Push the rotary button to confirm Data Import.




A dot is displayed.

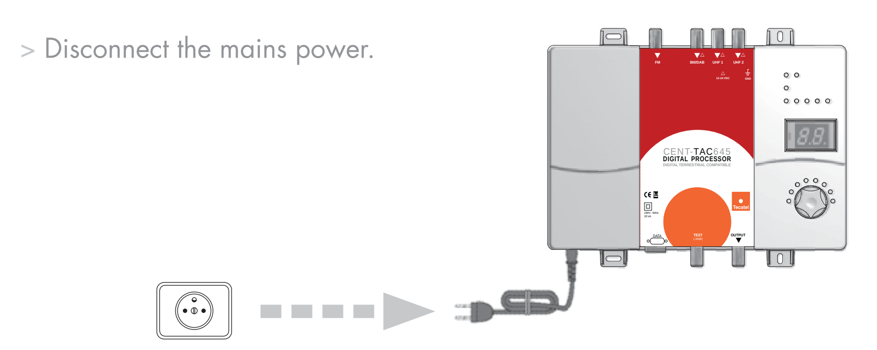


GENERAL RESET

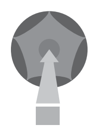
This function can reset all clusters and attenuators to zero.

Note: security code is not reset.

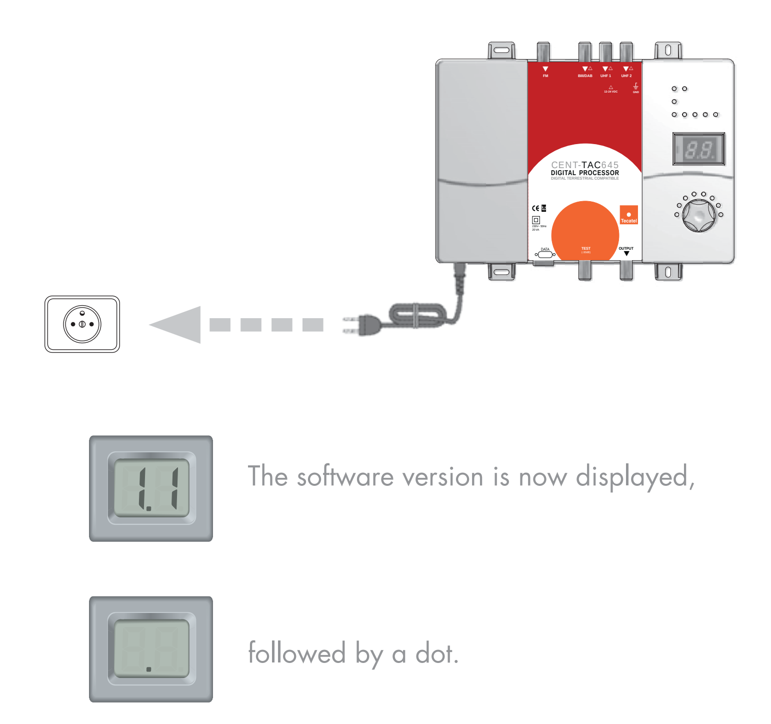
> Disconnect the mains power.



> Keep on pressing the button,



> until the mains is connected again.



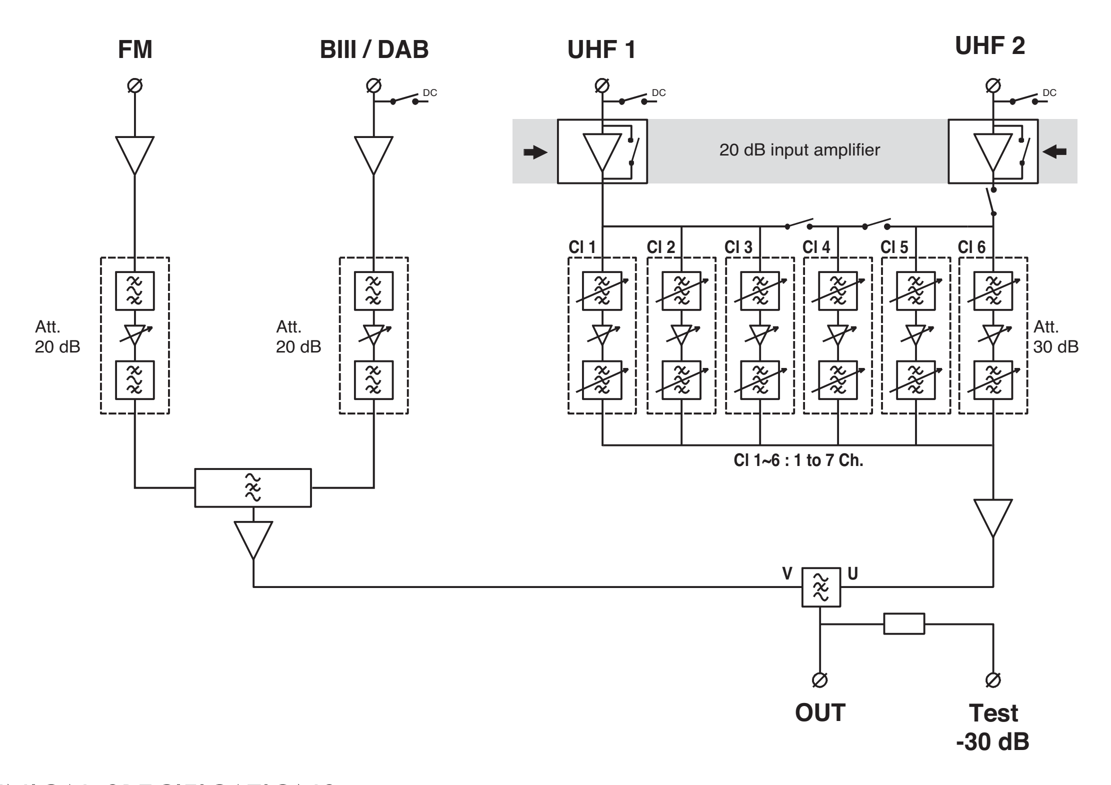
The software version is now displayed,

followed by a dot.

> Release the button.



BLOCK DIAGRAM

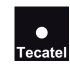


TECHNICAL SPECIFICATIONS

Inputs	FM	B III/DAB	UHF 1	UHF 2
Frequency range (MHz)	88-108	174-240	470-862	470-862
			8-56 (1 to 7 channels / cluster)	
Configuration of clusters	-	-	6	0
			3	3
			4	2
Gain (dB)	35	35	45	45
Attenuator (dB)	20	20	30	30
Noise figure (dB)	5	5	6	6
Max. input level (dBµV)	80	80	105	105
Max. output level * (dBµV)	116	116	116	116
Selectivity	-	15 dB / 10 MHz	10 dB / 10 MHz	
Return loss IN / OUT (dB)	>10	>10	>10	>10
Selectable remote power 12 - 24 V (100 mA in total)	-	yes	yes	yes
Test output (dB)	-30			
Data transfer	DSUB9 connector			
Power supply	230 V~ / 20 VA			
Operating temperature (° C)	- 5 to + 50			
Dimensions (mm)	231 x 185 x 53			

* -54 dB / IM3

Specifications are subject to change without notice





DECLARACIÓN DE CONFORMIDAD
DECLARATION OF CONFORMITY



Fabricante / Manufacturer: **TECATEL, S.A.**

Dirección / Address:
C/Lletra B, nº1.
Polígono Industrial Pardines
46722 Beniarjó
Valencia (Spain)

CIF/VAT: A-46940524

Declara bajo su responsabilidad la conformidad del producto:

Declares under its responsibility the conformity of the product:

Tecatel CENT-TAC645
Central digital programable,6 clusters UHF, 45dB
45dB,6 cluster, Programmable filter amplifier

País de fabricación/*Manufacturing country: Czech Republic*

Al que se refiere esta declaración con las normas y estándares siguientes:

To which this declaration refers with the following norms and standards

LVD:	***EN60065:2002***
	EN60728-11:2005
EMC:	***EN50083-2:2001+A1/2005***
	EN61000-3-2:2000+A2/2005
	EN61000-3-3:1995+A1:2001+A2/2005

De acuerdo con las disposiciones de las Directivas 2006/95/EC de Baja Tensión y 2004/108/EC de Compatibilidad Electromagnética del Parlamento Europeo y del Consejo.

According to the provisions set forth in the European Parliament and Council Directives 2006/95/EEC LVD (Low Voltage) and 2004/108/EEC EMC (Electromagnetic Compatibility).

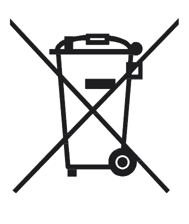
Beniarjó, 25/01/2010



Sergio Benavent
Responsable de producto



This product complies with the requirements of the Directives 2004/108/EC and 2006/95/EC



According to the WEEE (Waste electrical and electronic equipment) EU Directive, do not dispose of this product as household waste or commercial waste.
Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country.
For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.